


MEMORANDUM FOR CHIEF SWD Regional Integration Team, Attn: Mr. Blakey

Subject: May Branch, Fort Smith, Arkansas, Flood Damage Reduction Study, Final Feasibility Report and Environmental Assessment—Draft Final Chief of Engineers Report, Project Report Summary, and Documentation of Review Findings

HQUSACE policy compliance assessment of subject report is complete. The draft final report of the Chief of Engineers, Project Report Summary, and Documentation of Review Findings for the subject project is enclosed. Questions should be addressed to Jay Warren, the HQUSACE review manager, 202-761-5450.

Encl
As


ROBYN S. COLOSIMO, PE
Chief, Office of Water Project Review
Policy and Policy Compliance Division
Directorate of Civil Works

DOCUMENTATION OF REVIEW FINDINGS

MAY BRANCH, FORT SMITH, ARKANSAS
FLOOD DAMAGE REDUCTION PROJECT

FINAL FEASIBILITY REPORT
AND
FINAL ENVIRONMENTAL ASSESSMENT

SEPTEMBER 2006

Enclosure

CECW-PC

Subject: May Branch, Fort Smith, Arkansas, Flood Damage Reduction Project, Final Feasibility Report and Environmental Assessment (September 2006)—Documentation of Review Findings

DOCUMENTATION OF REVIEW FINDINGS

MAY BRANCH, FORT SMITH, ARKANSAS, FLOOD DAMAGE REDUCTION PROJECT

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DOCUMENTATION OF REVIEW FINDINGS

MAY BRANCH, FORT SMITH, ARKANSAS
FLOOD DAMAGE REDUCTION PROJECT
FINAL FEASIBILITY REPORT AND ENVIRONMENTAL ASSESSMENT
(September 2006)

1. BACKGROUND

a. Location. May Branch is a small urban tributary to the Arkansas River. The stream lies entirely within the city limits of Fort Smith, Sebastian County, in northwest Arkansas. The study reach is from the confluence of May Branch with the Arkansas River upstream to Park Avenue, approximately 3 miles.

b. Problem. Flooding in the 5.3-square mile drainage area of May Branch is flashy and of short duration. The basin is 100-percent urbanized. Most of the project area is located within a designated Federal Emergency Management Administration 100-year flood plain. Development includes low and high density housing, and commercial and industrial areas. May Branch originates in the south central section of the city and flows to the north and northwest to the Arkansas River. Approximately 2.75 miles of the original May Branch channel, from Park Avenue to the "P" Street Pump Station outfall at the Fort Smith Levee/Floodwall near the Arkansas River, were converted to an underground storm sewer tunnel in 1910. The underground storm sewer is referred to locally as the "P Street Storm Sewer." Runoff from storm events with recurrence intervals of approximately 10 years exceeds the tunnel capacity, flooding streets, residences, and commercial establishments. Significant flood damages in the upper reaches of May Branch occur with runoff from storms with an approximate 5-year recurrence interval. Under existing conditions a storm with a 1-percent chance of occurring in any year is expected to cause about \$7.2 million in flood damages. Expected annual flooding and related damages are cited as \$1.5 million. About 79 percent of the expected damages are related to flooding of residential and commercial structures.

c. Study Authorization. The May Branch, Fort Smith, Arkansas feasibility study was authorized by a March 11, 1982, resolution of the Committee on Public Works and Transportation of the United States House of Representatives. The resolution reads as follows:

RESOLVED BY THE COMMITTEE ON PUBLIC WORKS AND TRANSPORTATION OF THE HOUSE OF REPRESENTATIVES, UNITED STATES, that the Board of Engineers for Rivers and Harbors, established by Section 3 of the River and Harbor Act approved June 13, 1902, is hereby requested to review in cooperation with the States of Arkansas and Oklahoma, political subdivisions, agencies and instrumentalities thereof, and appropriated Federal Agencies as a shared effort, the report of the Chief of Engineers on the

Arkansas River and tributaries, published as House Document No. 308, seventy-fourth Congress, and other pertinent reports, with a view to determining whether any modification of the recommendations contained therein are advisable at this time, with particular reference to developing an implementable plan for storage, conservation, treatment, and conveyance of water in the Arkansas River and tributaries in Arkansas and Oklahoma, for municipal, industrial, and agricultural uses and other purposes. This study should include an assessment of the usability of water for various uses.

d. Report Recommendation. The recommended plan is the locally preferred plan (LPP). The proposed work consists of an open channel extending from a gated structure at the Arkansas River levee upstream approximately 2.75 miles to Park Street. The channel bottom width would vary from about 24 feet at the downstream end to about 4-feet for the 0.5 miles at the upstream end. Implementing the proposed project will require relocating a total of fifteen (15) structures. Highway bridges would be constructed at three locations to accommodate the new channel alignment. Box culverts would be constructed at six other roadway crossings. Additionally, box culverts would be constructed at five railroad crossings. By letter dated October 27, 2005, the Assistant Secretary of the Army (Civil Works) granted an exception to allow the recommendation of the LPP and to allow full Federal participation in cost-sharing reaches 1 through 4 of the LPP (a 2.25 mile-long channel from the Arkansas River upstream to Grand Avenue). Reaches 5 and 6 of the LPP (a 0.5 mile-long channel from Grand Avenue upstream to Park Street) will be constructed at 100-percent non-Federal expense.

e. Costs, Cost Apportionment, Benefits, Benefit-Cost Ratio. The report cites the total project cost of the LPP as \$30,850,000 at the October 2006 price level. The report shows project costs apportioned \$15,010,000 Federal and \$15,840,000 non-Federal. Based on a 4.875-percent discount rate and a 50-year period of economic evaluation, the LPP has a reported equivalent annual cost of \$1,540,000 and equivalent annual benefits cited as \$1,740,000. Equivalent annual net benefits are shown as \$200,000 and the indicated ratio of benefits-to-costs is 1.13 to 1. The City of Fort Smith, Arkansas, is the non-Federal sponsor of the project.

f. Expected Project Performance. The report indicates that the LPP will reduce expected annual damages by more than 96-percent percent and 127 structures would no longer be located in the 100-year regulatory flood plain.

2. DEFINITION OF THE LOCALLY PREFERRED PLAN (LPP). The report classifies work to be accomplished in reaches 5 and 6 as a “betterment” to be financed at 100-percent non-Federal cost. Betterments are defined in the Project Cooperation Agreement models as being the “difference in the construction of an element of the Project that results from the application of standards that the Government determines exceed those that the Government would otherwise apply to the construction of that element. The term does not include any construction for features not included in the Project.” Consequently, the “betterment” designation should be removed from the revised report. Revise the definition of the LPP to include reaches 5 and 6 (although the work in these reaches will be 100-percent funded by the non-federal sponsor). What the report calls “betterments” should be referred to as “reaches 5 and 6 of the LPP”, and

the remainder of the project can be referred to as the “reaches 1 through 4 of the LPP.” These direct references to the project reaches will facilitate distinguishing between those portions of the project subject to full Federal participation in cost sharing and those that are not. Revise the terminology and tables in the report accordingly.

District Response: What the draft report had called “betterments”, the revised report now refers to as “reaches 5 and 6 of the LPP” in both tables and text. Reaches 5 and 6 are shown to be 100 percent non-federal cost. See Tables 5 and 6 in the main report and Table 10 in the economic appendix.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

3. COST SHARING / PROJECT COSTS

a. Railroad Embankment Modification. Table 6, page 9, of the economics appendix shows \$2,744,900 in railroad modifications apportioned as a non-Federal relocation cost. Paragraph C-6.5, page 6 of the engineering appendix states: “All railroads involved requested to use concrete box culverts based on future maintenance costs.” Based on the description of the proposed work as box culverts to be constructed through the existing railroad embankments, it appears that this work item should be designated a project cost not LERR. Modify project cost sharing as appropriate.

District Response: The costs of the covered channel sections (box culverts) at the road and railroad crossings are designated as project costs. See Tables 5 and 6 in the main report and Table 10 in the economic appendix.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

b. Bridge Costs Versus Box Culvert Costs. The MCACES cost estimate appears to be based on the use of railroad bridges, whereas, the project description states that box culverts will be used where the new channel intersects existing railroads. Paragraph C-6.5, page 6 of the engineering appendix states the following: “All railroads involved requested to use concrete box culverts based on future maintenance costs.” Revise the report to discuss the relative life-cycle costs of bridges versus box culverts to justify the selection of box culverts over bridges. Review the MCACES cost estimate and revise as necessary to be consistent with the current description of proposed project features.

District Response: The MCACES cost estimate was revised by marking out “Bridges, Superstructure & Decks...” and inserting “box culverts” at the railroad crossings. The WBS in MCACES did not include “Box Culverts” as a choice so the item “bridges...” was used in the draft report MCACES cost estimate. However, the costs shown were estimates for box culverts. The sentence in paragraph C-6.5 “All railroads involved requested to use concrete box culverts

based on future maintenance costs.” was replaced with “Railroad crossings were designed to railroad standards, which are covered channel sections constructed of concrete box culverts.”

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

4. EMERGENCY, NON-PHYSICAL, AND UTILITY COSTS. The *emergency costs, non-physical, and utility* damage category accounts for almost 20% of the total benefits claimed.

a. Emergency Costs. The report relies on data from the 1981 flood damage reduction report for Frankfort, Kentucky. The emergency costs from that report were based on a large single event that included a disaster declaration with significant impacts to the entire community. The report describes flooding in the May Branch basin as “flashy and of short duration.” It is not clear how the Frankfort, Kentucky data would apply to the flashy, short duration, flooding in the May Branch area. Provide additional information describing how the data from the Frankfort study was used in the estimation of emergency cost savings cited for the NED plan and LPP. Further, provide support for applying the Frankfort, Kentucky data to the anticipated flooding situation in the Fort Smith area.

District Response: Page 4 of the Economic Appendix describes how the Frankfort, Kentucky, data was used in estimating the emergency costs. An example of the calculations for the 0.002 event without project and with the LPP in place is included as Table 4. The unit costs tabulated in the Frankfurt study were adjusted for price level and were applied to shorter durations as suitable for the flashy flooding that occurs along May Branch. In addition, no damages were calculated for flood events more frequent than the .02 exceedance probability event.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

b. Avoided Non-Physical Losses. Page 5 of the Economics appendix states the following: “Examples of nonphysical losses are ... loss of income and wages to commercial establishments that may be closed for indefinite periods depending on the severity of a flood event; business owners also could incur losses due to lack of accessibility resulting from street and roadway flooding.” ER 1105-2-100, paragraph 3-3.c.(2)(b), page 3-15 states the following: “Prevention of income losses result in a contribution to national economic development *only to the extent that the losses cannot be compensated for by postponement of an activity or transfer of the activity to other establishments.*” Paragraph E-19.o.(1) , page E-104 states: “The loss of income by commercial, industrial, and other business firms is difficult to measure because of the complexity involved in determining whether the loss is recovered by the firm at another location or at a later time.” The report provides no documentation to support a finding that preventing the estimated business income and wage losses should be considered NED benefits and not regional transfers. Given the difficulty in substantiating the validity of such benefits, they should be deleted from the total benefits claimed. Net benefits and the benefit-cost ratios should be revised accordingly.

District Response: Loss of business income was deleted from the total benefits claimed. The nonphysical loss of additional living expenses due to flooding was maintained. See page 6 and Table 5 for an example of how those benefits were calculated (with no benefits derived from flood events more frequent than the .02 exceedance probability event). The net benefits and the benefit to cost ratios were revised accordingly as shown in Tables 7, 8, 9, and 11 in the Economic Appendix and Tables 2 and 3 in the main report.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

c. Utility Costs. The economics appendix states that utility damages were estimated by applying a percentage factor to the estimate of total physical losses from the FDA model. The revised report should expand the discussion of the derivation of this benefit component. Explain what percentage factor was used and why it is appropriate for the current study.

District Response: The utility cost factor of 15.6 per cent is shown in Table 6 in the Economic Appendix. The factor was computed from actual experienced losses obtained from the utility companies from two flood events that were then verified by a third event in Little Rock. Little Rock is the largest urban area in the state and Fort Smith is the second largest, both within the Arkansas River Basin, thus making the factor appropriate for the current study.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

5. NET BENEFITS AND BENEFIT-COST RATIO COMPUTATIONS. Page 10 of the Real Estate Appendix states the following: “Relocation assistance benefits will be available for displaced businesses and impacted by this project. Relocation benefits will involve 2 businesses in Reach 1, 5 businesses in Reach 2, and 5 businesses in Reach 4 where the construction of the May Branch drainage channel will result in the removal of the improvements within the alignment of the channel.” It appears that about \$456,100 in *relocation assistance payments* is included in the estimate of project costs used to compute net benefits and the benefit-cost ratios. Paragraph 10-2.c. of EP 1165-2-1 suggests that while such costs are properly project costs they should not be included in the computation of the project benefit-cost ratio. Re-compute the net benefits and benefit-cost ratios for the NED plan and LPP excluding *relocation assistance payment costs*.

District Response: The relocation assistance costs were excluded from the economic analysis and the net benefits and benefit to cost ratios were re-computed. See Tables 9 and 10 in the Economic Appendix, paragraph 11 in the Real Estate plan, and Tables 2, 3, 6, and 7 in the main report.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

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6. PROJECT PERFORMANCE. ER 1105-2-101 requires that risk-based statistics be used to describe project performance. The Risk and Uncertainty discussion on page 11 of Appendix B, Economics, should be expanded to include the annual exceedance probabilities (AEP) associated with the various alternative plans.

District Response: Table 14 in the Economic Appendix was included to display AEP for the various plans.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

7. WITHOUT PROJECT AND WITH PROJECT EVALUATIONS. The report does a good job describing the 500-year floodplain with respect to damages, number of structures, type of structures, and area of inundation for the with- and without project conditions. However, very little information is provided to describe the smaller flood events for which the formulation focuses. Revise the report to provide information on the 100-year and 10-year events at a minimum to fully describe the economic environment that are used as the basis to formulate alternatives.

District Response: Table 3, Single Event Damages, in the Economic Appendix was expanded to include the number of structures flooded for the array of recurrence intervals. The value of structures in the floodplain for the 10- and 100-yr events was included on page 6 in the main report.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

8. SECTION 404 CLEAN WATER ACT (page 38). The report states that the Corps would verify a number of nationwide permits during the design phase of the project. The Corps of Engineers does not issue itself permits for the discharge of dredged and fill material associated with Civil Works feasibility studies. Compliance with Section 404 of the Clean Water Act for Civil Works projects is demonstrated through completion of the Section 404(b) 1 Guidelines analysis and documentation that the project meets the requirements of CWA Section 404(r), as outlined in section C-6 of ER 1105-2-100. HQUSACE recommends that any references to the nationwide permit program be deleted from the report, and that the text of the NWPs be removed from Appendix A.

District Response: The text of the NWPs was removed from Appendix A and their reference was removed from the report.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

9. REAL ESTATE PLAN.

a. Paragraph 2 states that the right-of-way ownership of the Missouri Pacific Railroad extends throughout the project (Reaches 1 through 6). Yet, only an 11.87 acre area located in Reaches 3 and 4 is described. District should identify the Missouri Pacific Railroad acreage affected by the project in Reaches 1 and 2 as well as 5 and 6.

District Response: Paragraph 2 was revised to describe the Missouri Pacific Railroad right-of-way for Reaches 1 – 6.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

b. Paragraph 12 states that there is no mineral activity nor anticipated mineral activity within the project area that would require subordination of mineral interests. Therefore, last sentence of paragraph should be deleted.

District Response: Last sentence of paragraph 12 was deleted.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

c. Paragraph 15 discusses the acquisition milestones for Reaches 1 through 4. However, if Reaches 5 and 6 are being considered part of the construction, land acquisition milestones for Reaches 5 and 6 should also be addressed.

District Response: Milestone information in Paragraph 15 was revised to include Reaches 5 & 6.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

d. Paragraph 15 includes discussion of federal condemnation proceedings. There is no indication in the REP that the NFS will request the Corps to undertake acquisition on their behalf. The REP should reflect the sponsor acquisition/condemnation process in state court and the acquisition schedule should also reflect that process.

District Response: Information in Paragraph 15 was revised to reflect the sponsor acquisition/condemnation process and schedule in state court.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

e. Paragraph 16 states that there are multiple facility and utility relocations. The cost of such relocations is the responsibility of the non-Federal sponsor. The REP fails to include the relocation costs as part of LERRD. The costs are found, however, in Appendix C, Engineering

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Appendix at line items 02 and 08. District should incorporate those costs found in Appendix C into the REP and state that the nearly \$7.8M for relocations is an upfront cost of the non-Federal sponsor in addition to the LERRD costs already shown in the REP.

District Response: Paragraph 16 was revised to include the non-Federal sponsor's upfront relocation costs.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

f. Paragraph 16 also references an "attached" Attorney's Preliminary Report of Compensability. The Attorney's opinion should be submitted as a separate document and not be available for public review. Consequently, Exhibit E should be removed from the report and the second sentence should be revised accordingly.

District Response: Exhibit E and its reference as an exhibit was removed from the report

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

10. ATTORNEY'S PRELIMINARY REPORT OF COMPENSIBILITY. With respect to the Attorney's Preliminary Report of Compensability, it does not appear to be prepared in accordance with the guidance set forth in ER 405-1-12, paragraph 12-17. Furthermore, the opinion seems to include a discussion of relocation benefits to be provided pursuant to PL 91-646.

District Response: The Attorney's Preliminary Report of Compensability, is revised to be in accordance with the guidance set forth in ER 405-1-12, paragraph 12-17. The revised attorney's report is submitted with the summary report package.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

11. BASELINE COST ESTIMATE.

a. The Baseline Cost Estimate needs to distinguish between costs that are creditable LERRD costs and those that are administrative costs of the federal government and not creditable. The cost estimate appears to lump all costs together.

District Response: Paragraph 10 has separated the creditable LERRD costs from the Federal administrative costs.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

b. In the Baseline Cost Estimate, additional contingencies should not be added to the land values. The gross appraisal should already account for all land value variations and contingencies are built into the appraisal process. Contingencies for unexpected events, escalation in labor costs and for other uncertainties in the project design or implementation should only be added to the labor costs, not land costs. See EC 405-3-2, Chapter 4, Par. 4-21(d) that reads:

Added contingencies. Contingencies must be supported by narrative discussion, taking into account the reliability of the data available, the type and scope of the project and the real estate involved. Elements such as valuation variance or negotiation latitude, condemnation awards and interest, refinement of boundary lines due to ownership verification, and hidden or unforeseen aspects of improvements or potential natural resources or minerals shall be clearly confronted. Contingencies should also consider the number or percentage of cases that would likely go to court and what the history of awards has been in the particular court jurisdiction. The validity of appropriate contingencies includes explanation and justification.

District Response: Additional contingencies were removed from the land values and the validity of the contingencies was explained in Paragraph 10.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

12. **RECOMMENDATIONS.** Refer to page 46, third paragraph. Since Public Law 99-662 (the 1986 WRDA) has been amended a number of times, insert a comma after the work "amended" and delete "by Sections 202 of Public Law 104-303, the Water Resources Development Act of 1996".

District Response: On page 46, a comma after the work "amended" was inserted and "by Sections 202 of Public Law 104-303, the Water Resources Development Act of 1996" was deleted.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

13. **ITEMS OF LOCAL COOPERATION.** Delete the items of Local Cooperation a. through s. and substitute the following:

a. Provide a minimum of 35 percent but not to exceed 50 percent of total project costs allocated to reaches 1 through 4 of the project, as further specified below:

(1) Enter into an agreement which provides, prior to execution of the project cooperation agreement, 25 percent of design costs;

(2) Provide, during construction, any additional funds needed to cover the

non-Federal share of design costs allocated to reaches 1 through 4;

(3) Provide, during construction, a cash contribution equal to 5 percent of total project costs allocated to reaches 1 through 4;

(4) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of reaches 1 through 4;

(5) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of reaches 1 through 4; and

(6) Provide, during construction, any additional costs as necessary to make its total contribution equal to at least 35 percent of total project costs allocated to reaches 1 through 4.

b. Provide 100 percent of total project costs allocated to reaches 5 and 6 of the project, as further specified below:

(1) Enter into an agreement which provides, prior to execution of the project cooperation agreement, 25 percent of design costs;

(2) Provide, during construction, any additional funds needed to cover 100 percent of design costs allocated to reaches 5 and 6;

(3) Provide all lands, easements, and rights-of-way, including suitable borrow and dredged or excavated material disposal areas, and perform or assure the performance of all relocations determined by the Government to be necessary for the construction, operation, and maintenance of reaches 5 and 6;

(4) Provide or pay to the Government the cost of providing all retaining dikes, wasteweirs, bulkheads, and embankments, including all monitoring features and stilling basins, that may be required at any dredged or excavated material disposal areas required for the construction, operation, and maintenance of reaches 5 and 6; and

(5) Provide, during construction, any additional costs as necessary to make its total contribution equal to 100 percent of total project costs allocated to reaches 5 and 6.

c. Give the Government a right to enter, at reasonable times and in a reasonable manner, upon land which the non-Federal sponsor owns or controls for access to the project for the purpose of inspection, and, if necessary, for the purpose of completing, operating, maintaining, repairing, replacing, or rehabilitating the project.

d. Assume responsibility for operating, maintaining, replacing, repairing, and rehabilitating (OMRR&R) the project or completed functional portions of the project, including mitigation features, without cost to the Government, in a manner compatible with the project's authorized purpose and in accordance with applicable Federal and State laws and specific directions prescribed by the Government in the OMRR&R manual and any subsequent amendments thereto.

e. Comply with Section 221 of Public Law 91-611, Flood Control Act of 1970, as amended, and Section 103 of the Water Resources Development Act of 1986, Public Law 99-662, as amended, which provides that the Secretary of the Army shall not commence the construction of any water resources project or separable element thereof, until the non-Federal interest has entered into a written agreement to furnish its required cooperation for the project or separable element.

f. Hold and save the United States free from all damages arising for the construction, operation, maintenance, repair, replacement, and rehabilitation of the project and any project-related betterments, except for damages due to the fault or negligence of the United States or its contractors.

g. Keep and maintain books, records, documents, and other evidence pertaining to costs and expenses incurred pursuant to the project to the extent and in such detail as will properly reflect total project costs, and in accordance with the standards for financial management systems set forth in the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments in 32 CFR Section 33.20.

h. Perform, or cause to be performed, any investigations for hazardous substances that are determined necessary to identify the existence and extent of any hazardous substances regulated under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. 9601-9675, that may exist in, on, or under lands, easements or rights-of-way necessary for the construction, operation, and maintenance of the project; except that the non-Federal sponsor shall not perform such investigations on lands, easements, or rights-of-way that the Government determines to be subject to the navigation servitude without prior specific written direction by the Government.

i. Assume complete financial responsibility for all necessary cleanup and response costs of any CERCLA regulated materials located in, on, or under lands, easements, or rights-of-way that the Government determines necessary for the construction, operation, or maintenance of the project.

j. Agree that, as between the Government and the non-Federal sponsor, the non-Federal sponsor shall be considered the operator of the project for the purpose of CERCLA liability, and, to the maximum extent practicable, operate, maintain, repair, replace, and rehabilitate the project in a manner that will not cause liability to arise under CERCLA.

k. Prevent obstructions of or encroachments on the project (including prescribing and enforcing regulations to prevent such obstructions or encroachments) which might reduce the

level of protection it affords, or hinder its operation and maintenance, or interfere with its proper functioning, such as any new development on project lands or the addition of facilities which would degrade the benefits of the project.

l. Comply with the applicable provisions of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public law 91-646, as amended by Title IV of the Surface Transportation and Uniform Relocation Assistance Act of 1987 (Public Law 100-17), and the Uniform Regulations contained in 49 CFR Part 24, in acquiring lands, easements, and rights-of-way, and performing relocations for construction, operation, and maintenance of the project, and inform all affected persons of applicable benefits, policies, and procedures in connection with said act.

m. Comply with all applicable Federal and State laws and regulations, including Section 601 of the Civil Rights Act of 1964, Public Law 88-352, and Department of Defense Directive 5500.11 issued pursuant thereto, as well as Army Regulation 600-7, entitled "Nondiscrimination on the Basis of Handicap in Programs and Activities Assisted or Conducted by the Department of the Army"; and all applicable Federal labor standards requirements including, but not limited to, 40 U.S.C. 3141-3148 and 40 U.S.C. 3701-3708 (revising, codifying and enacting without substantive change the provisions of the Davis-Bacon Act (formerly 40 U.S.C. 276a *et seq.*), the Contract Work Hours and Safety Standards Act (formerly 40 U.S.C. 327 *et seq.*) and the Copeland Anti-Kickback Act (formerly 40 U.S.C. 276c)).

n. Comply with Section 402 of the Water Resources Development Act of 1986, as amended (33 U.S.C. 701b-12), which requires a non-Federal interest to prepare a floodplain management plan within one year after the date of signing a Project Cooperation Agreement. The plan shall be designed to reduce the impacts of future flood events in the project area, including but not limited to, addressing those measures to be undertaken by non-Federal interests to preserve the level of flood protection provided by the project. As required by Section 402, implement the plan not later than one year after completion of the construction of the project. Provide an information copy of the plan to the Government upon its preparation.

o. Provide the non-Federal share of that portion of the costs of archeological data recovery activities associated with historic preservation, that are in excess of 1 percent of the total amount authorized to be appropriated for the project, in accordance with the cost sharing provisions of the agreement.

p. Participate in and comply with applicable Federal floodplain management and flood insurance programs.

q. Publicize floodplain information in the area concerned and provide this information to zoning and other regulatory agencies for their use in adopting regulations, or taking other actions, to prevent unwise future development and to ensure compatibility with protection levels provided by the project.

r. Do not use Federal funds to meet the non-Federal sponsor's share of total project costs unless the Federal granting agency verifies in writing that the expenditure of such funds is

authorized.

s. Inform affected interests, at least annually, regarding the extent of the protection afforded by the project.

District Response: The items of Local Cooperation a. through s. were deleted and the provided items were substituted.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

14. MISCELLANEOUS

a. Page 1 on the Executive Summary states the following: "...the Assistant Secretary of the Army (Civil Works) granted an exception to allow the recommendation of the LPP and to cost share the entire plan." This statement must be revised to indicate that the ASA(CW) granted an exemption to allow full Federal participation in cost-sharing reaches 1 through 4 of the LPP and that reaches 5 and 6 of the LPP will be constructed at 100-percent non-Federal expense.

District Response: Page 1 of the Executive Summary was revised to state that the ASA(CW) granted an exemption to allow full Federal participation in cost-sharing reaches 1 through 4 of the LPP and that reaches 5 and 6 of the LPP will be constructed at 100-percent non-Federal expense.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

b. Appendix C, page 8, paragraph C-12, states the following: "... (essentially a 100-year level of protection) ...". Note that the level-of-protection concept is not compatible with the Corps risk-based project performance statistics. Consequently, references to "level of protection" should be removed from the feasibility report.

District Response: References to "level of protection" were removed from the feasibility report.

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

c. The "Economic Summary" paragraph on page 25 states the following: "As the downstream end of the channel would produce benefits as soon as constructed, the interest during construction cost would be conservative." Benefits-during-construction (BDC) and interest-during-construction (IDC) are independent computations; consequently, this sentence should be revised or deleted.

District Response: The sentence on page 25 was deleted.

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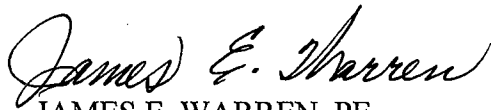
Subject: May Branch, Fort Smith, Arkansas, Flood Damage Reduction Project, Final Feasibility Report and Environmental Assessment (September 2006)—Documentation of Review Findings

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.

d. Page 10 of the economics appendix states the following: “These estimates are based on a project life of 50 years,...”. The “life” of a Corps project is perpetual or until de-authorized by Congress. Replace “project life” with “period of economic analysis.”

District Response: On page 10, “project life” was replaced with “period of economic analysis.”

HQUSACE Team Assessment: The response is adequate; this issue is **resolved**.


JAMES E. WARREN, PE
Policy Compliance Review Manager